

Air Education and Training Command



Occupational Survey Report AFSC 4D0X1 Diet Therapy

U.S. AIR FORCE

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April 02

Integrity - Service - Excellence

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Overview



AETC

- Work performed
- Survey background
- Current training program
- Survey sample characteristics
- Job structure
- Career ladder progression
- First-enlistment analysis
- STS and POI analysis
- Job satisfaction analysis
- Retention analysis
- Summary of results



Work Performed



AETC

- Procures, stores, prepares, cooks, bakes, and serves regular and therapeutic diets and nourishments
- Performs clinical dietetics tasks
- Procures equipment
- Maintains established sanitation, safety, and security standards
- Accomplishes supply and subsistence management control

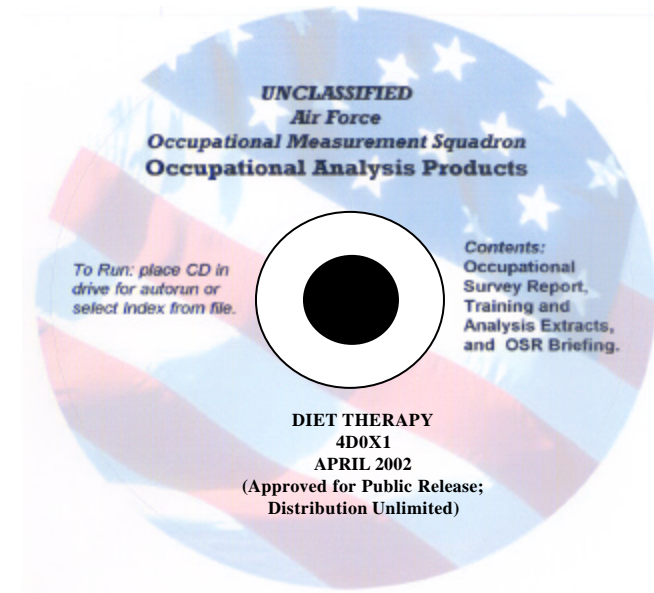


Survey Background



AETC

- Survey initiated to obtain data to:
 - Evaluate current classification and training documents
 - Support promotion test development
- Last Occupational Survey Report (OSR) - 1999
- Current survey data collected- July-October 2001
- Components Surveyed:
 - Active Duty: 3-, 5-, 7- and 9-Skill Levels
 - Reserve: 5-, and 7-Skill Levels





Current Training Program



AETC

- AFSC awarding course
 - 382 TRS, Sheppard AFB, TX
 - J3ABR4D0X1, Diet Therapy Apprentice, 5 weeks
 - 9 Semester hours for CCAF
 - Programmed Elimination Rate

FY02: 5%	FY02: 50 students
FY03: 5%	FY03: 79 students



Survey Sample Characteristics



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	<u>AD</u>	<u>AFRC</u>	<u>Total</u>
Assigned*	389	85	474
Surveyed	345	79	424
Sample	212	24	236
% of Surveyed	61	30	56

- Average time in career field for AD: 9 yrs 1 months
- Average TAFMS for AD: 10 yrs 1 months
- Percent of AD in first enlistment: 24%



Skill & Paygrade Characteristics



AETC

Skill Level Distribution

	Assigned*	Sample
3-Level -	23%	21%
5-Level -	52%	48%
7-Level -	23%	30%
9-Level -	1%	1%
CEM	1%	0%

Paygrade Distribution

	Assigned*	Sample
E-1 - E-3 -	14%	17%
E-4 -	18%	19%
E-5 -	31%	29%
E-6 -	23%	23%
E-7 -	12%	11%
E-8 -	1%	1%
E-9 -	1%	0%

* Assigned as of May 01



Command Representation



AETC



Command	Assigned %*	Sample %
AETC	24	33
AMC	18	12
ACC	12	16
AFMC	8	10
USAFE	6	6
PACAF	7	9
USAFA	3	4
AFRC	21	10

Columns might not add to 100 due to rounding error.

* Assigned as of May 01



Job Structure



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Sample size: 236

Hospital Kitchen Cluster
48%

Clinical Dietetics
Indep. Job:
6%

Nutritional
Education
Indep. Job:
8%

Management,
Supervision, &
Training Cluster
19%

Not Grouped
14%

Storeroom
Indep. Job
3%

Equipment
Indep. Job
2%





Hospital Kitchen Cluster (N=122)



AETC

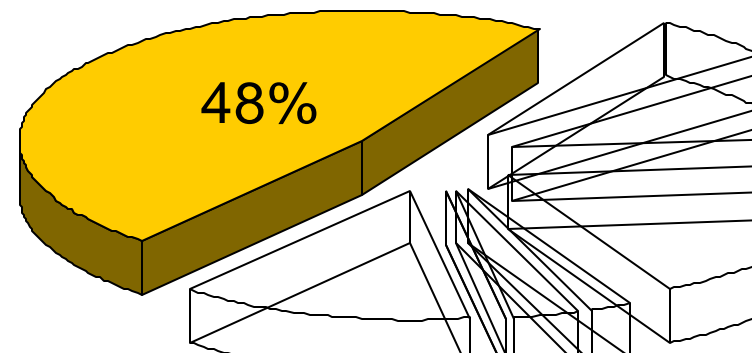
- Make salads
- Prepare eggs
- Prepare sandwiches
- Portion individual servings of food
- Prepare vegetables
- Prepare canned foods for cooking or serving
- Portion individual servings of beverages
- Clear, clean, and sanitize worktables or areas
- Prepare cereals

Cooking Job

Cooking and Cleaning Job

Food Serving Job

NCOIC Kitchen Job



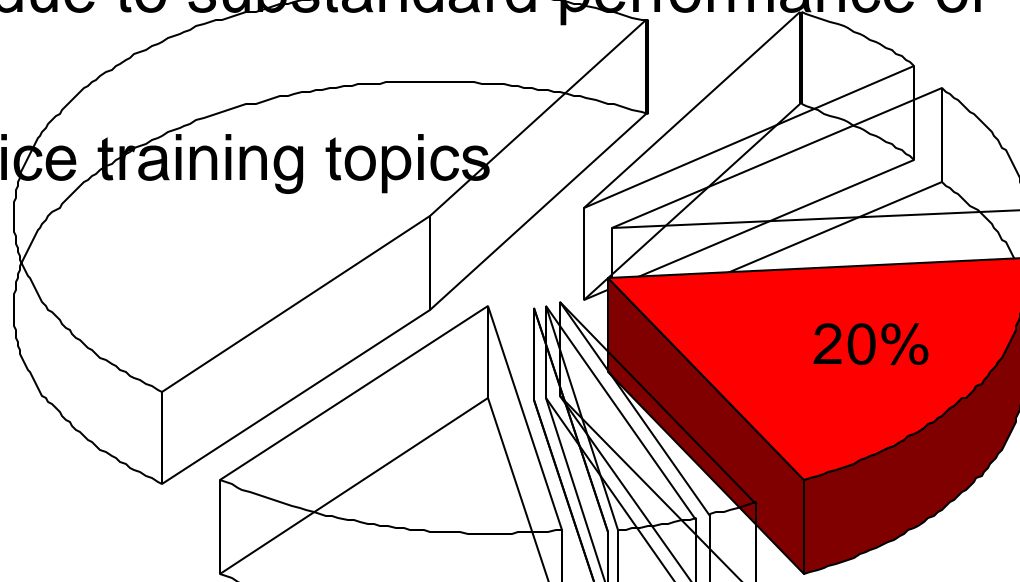


AETC

Training Cluster (N=122)

- Write or indorse military performance reports
- Conduct supervisory performance feedback sessions
- Inspect personnel for compliance with military standards
- Interpret policies, directives, or procedures for subordinates
- Write recommendations for awards or decorations
- Counsel subordinates concerning personal matters
- Initiate actions required due to substandard performance of personnel
- Develop monthly in-service training topics

NCOIC Management Job
Non-Kitchen Supervisor Job
Supervisor/Trainer Job





Two Independent Jobs



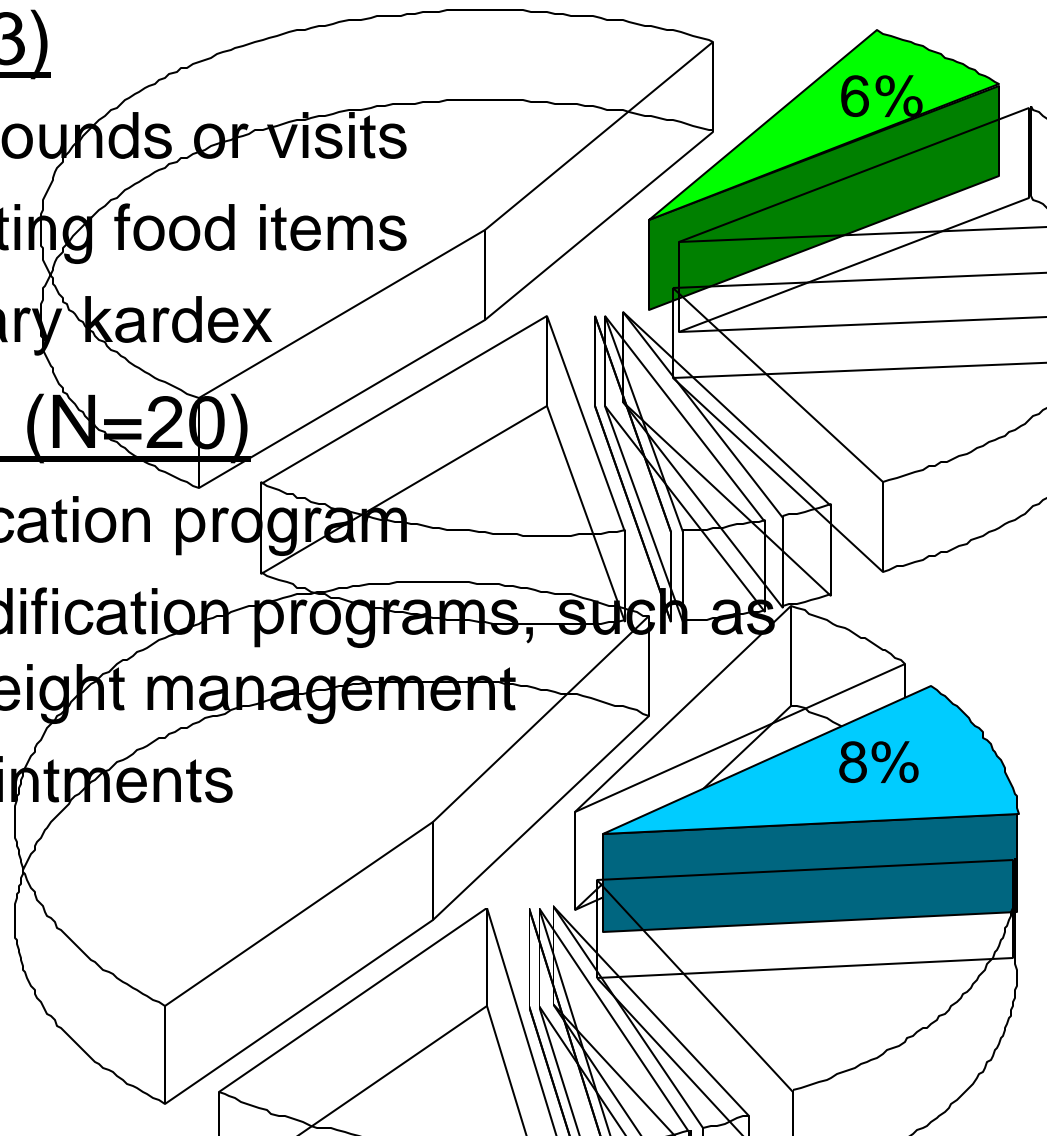
AETC

- Clinic Dietetics IJ (N=13)

- Conduct inpatient unit rounds or visits
- Advise patients in selecting food items
- Write menus using dietary kardex

- Nutritional Education IJ (N=20)

- Conduct nutritional education program
- Conduct behavioral modification programs, such as smoking cessation or weight management
- Conduct follow up appointments





Two Independent Jobs



1271

- NCOIC Equipment IJ (N=5)
 - Pick up, deliver, or store equipment, tools, or parts
 - Evaluate serviceability of equipment, tools, parts, or supplies
 - Issue or log turn ins of equipments,tools, or parts
- Storeroom Independent IJ (N=8)
 - Purchase, receive, or inspect food items from vendors, such as local or prime
 - Removes food items for thawing
 - Return excess substance to stock

2%

3%



Career Ladder Progression



AETC

- 3-skill-level personnel start in Kitchen Cluster Job
- 5-skill-level personnel
 - Some move into independent job
 - Begin to take on leadership roles
- 7- skill-level personnel
 - Continue to perform technical tasks
 - Devote a substantial percentage of their time to management, supervision, and training tasks





DAFSC

AETC

	DAFSC 4D031 (N=49)	DAFSC 4D051 (N=114)	DAFSC 4D071 (N=70)	DAFSC 4D091 (N=3)
Hospital Kitchen Cluster	76	46	32	0
Clinical Dietetics IJ	8	8	0	0
Nutritional Education IJ	0	11	10	0
Management/Supervision, & Training Cluster	2	11	40	100
NCOIC Equipment IJ	0	2	4	0
Storeroom IJ	4	5	0	0
Not Grouped	10	17	14	0

Columns might not add to 100 due to rounding error.



AD DAFSC



	DAFSC 4D031 (N=49)	DAFSC 4D051 (N=109)	DAFSC 4D071 (N=51)	DAFS 4D091 (N=3)
Hospital Kitchen Cluster	76	46	24	0
Clinical Dietetics IJ	8	8	0	0
Nutritional Education IJ	0	12	14	0
Management/Supervision, & Training Cluster	2	11	47	100
NCOIC Equipment IJ	0	2	6	0
Storeroom IJ	4	6	0	0
Not Grouped	10	16	10	0

Columns might not add to 100 due to rounding error.



AFRC DAFSC



AETC

	DAFSC 4D051 (N=5)	DAFSC 4D071 (N=19)
Hospital Kitchen Cluster	60	53
Management/Supervision, & Training Cluster	0	21
Not Grouped	40	26

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Percent Time Spent on Duties



AETC

DAFSC 4D031 (N=49)	DAFSC 4D052 (N=114)	DAFSC 4D071 (N=70)	DAFSC 4D091 (N=3)
20	16	8	3
8	5	3	0
18	9	5	1
21	10	7	2
17	21	12	1
1	6	10	0
1	6	2	4
2	4	2	4
1	1	0	0
1	1	2	2
1	1	5	8
0	2	4	5
2	3	4	2
1	3	9	6
2	10	24	58

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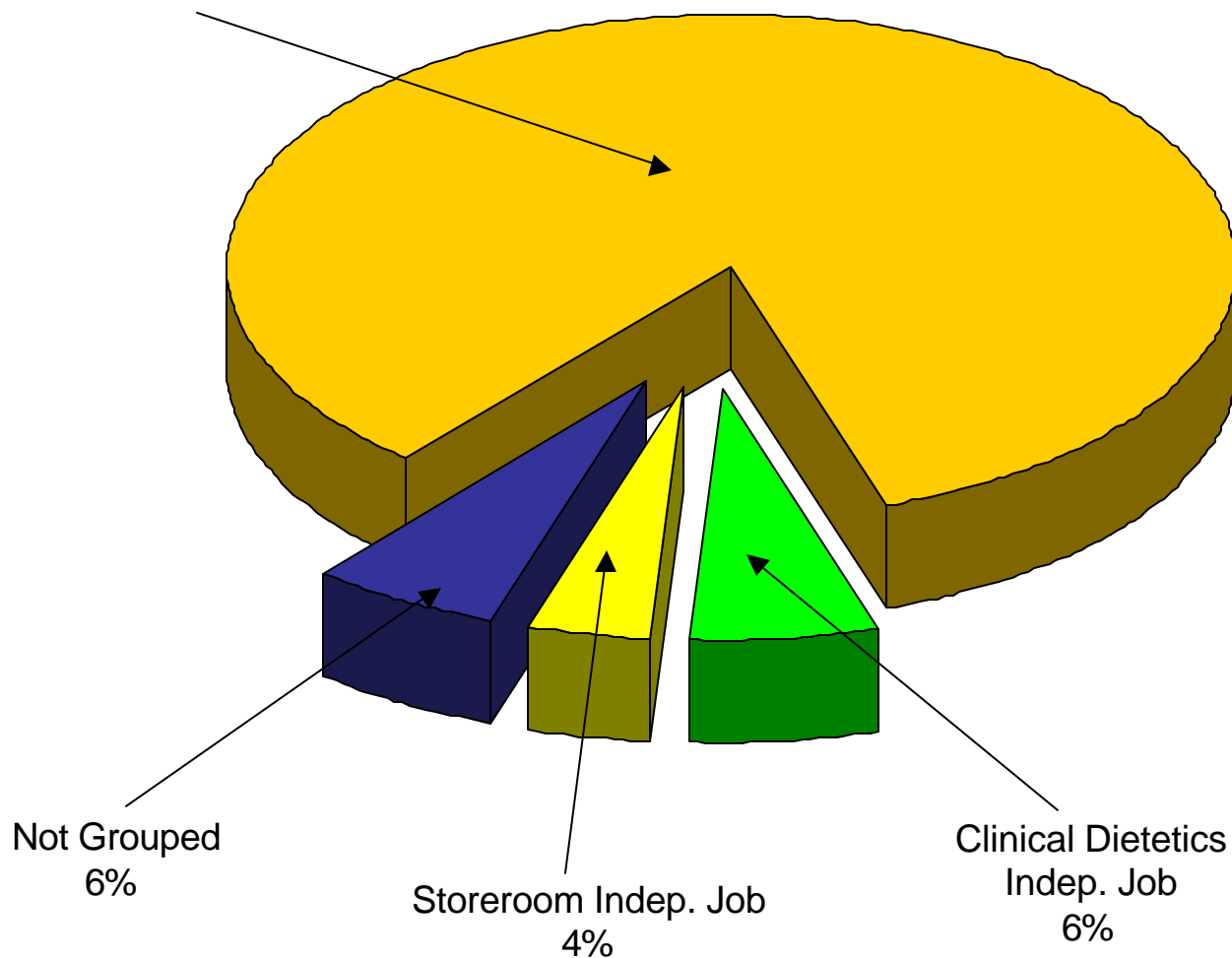
First-Enlistment Job Structure



AETC

Sample size: 52

Hospital Kitchen Cluster
84%





First Employment Performance Representative Tasks



AETC

Percent
Members
Performing
(N=52)

Tasks

Cover, date, time, and store leftover food items	71
Maintain personal hygiene, other than under field conditions	69
Prepare eggs	69
Prepare fruits	67
Sample foods by taste or smell	67
Make gelatin desserts	67
Arrange patients' trays to enhance appearance	65
Make coffee, tea, or cocoa	65
Make salads, other than gelatin salads	65
Verify food and beverage serving temperatures	63
Clean refrigerators or freezers	63
Clean floors, walls, and ceilings	62
Deep fat fry foods	62
Prepare broths for cooking	62
Clean microwaves, ranges, or ovens, other than combination ovens	62



First Enlistment Personnel Special Diets



AETC

Percent
Members
Preparing
(N=52)

Special Diets

Full Liquid	83
Diabetic	81
Blenderized Liquid	79
Cardiac	79
Clear liquid, other than Diabetic	79
Soft	75
Calorie Restricted	73
Pediatric	73
Sodium Restricted	73
Fiber and Residue Restricted	65
Renal	63
Cholesterol R or Step I/Step II	60
High Fiber	60
Protein Restricted	60
Convection Oven	63
Coffee Maker	62



First Enlistment Personnel Tools & Equipment



AETC

Percent
Members
Using
(N=52)

Equipment

Can Openers	83
Utility Carts	83
Blenders	81
Calculators	79
Walk In Refrigerators	79
Dish Washers	75
Reach In Refrigerator	75
Assorted Knives	73
Vacuum Cleaners	73
Computer	73
Walk In Freezer	72
Reach In Freezer	69
Deep Fat Fryers	67
Microwave Ovens	67
Convection Oven	63
Coffee Maker	62



Specialty Training Standard (STS) Analysis



AETC

- Survey data supported most STS elements
 - Twelve STS elements were unsupported
 - Data failed to support performance coding of any elements in the Medical Readiness and Subsistence Control sections.
- Only five technical tasks performed by 20 percent or more of members were not referenced to STS
 - These should be reviewed for possible inclusion in STS





Unsupported STS Elements



AETC

Examples

Unit	Learning Objective	Prof Code	Percent Members Performing		Task Dif
			1st Job	1st Enl	
2.3 Task	Prepare meals under field conditions K0298 Prepare meals under field conditions	2b	0	8	5.70
13.7 Task	Perform inventory H0246 Maintain subsistence inventory, other than by NMIS	2b	4	10	5.47
13.11 Task	Use AF Form 543 H0243 Issue food items, other than by using NMIS	1a	9	12	5.52
17.2 Task	Collect cash and signatures from diners I0260 Perform cash box function for conventional dining facilities	1a	13	17	5.02

Mean TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)





Tasks not Referenced to STS



AETC

Examples

<u>Tasks</u>		<u>Percent Members Performing</u>		<u>Task Dif</u>
		1 st	1 st	
		<u>Job</u>	<u>Enl</u>	
A0009	Grill food	57	60	4.15
C0081	Assist patients through serving lines	39	38	3.41
C0108	Transfer food from trays to microwave dishes for heating	22	31	2.86
E0170	Collect data for nutrition outcomes	22	33	5.62
E0171	Compile data for nutrition outcomes	22	27	5.87

Mean TD Rating is 5.00, Standard Deviation is 1.00(HIGH TD= 6.00)



Plan of Instruction (POI) Analysis



AETC

- Data supports most learning objectives in POI
 - Most unsupported learning objectives in Block III of POI
- Tasks not referenced to any POI learning objective should be reviewed for possible inclusion in POI





Unsupported POI Objectives



AETC

Examples

Objective/Matched Tasks	Percent Members Performing		Task Dif	
	1 st Job	1 ^t Enl		
<u>II.1.f</u> <u>Given AF forms 542 and an inventory adjustment report, perform inventory adjustments with no more than 5 instructor assists.</u>				
H0246 Maintain subsistence inventory, other than NMIS	4	14	5.47	
H0248 Prepare for inventories of subsistence	9	3	5.42	
<u>II.1.i</u> <u>Given NMIS Training Manual, NMIS, NMIS computer terminal, perform NMIS applications with no more than 10 instructor assists.</u>				
A0010 Locate or extract recipes using NMIS	13	17	5.54	
F0204 Create nourishment labels using NMIS	13	28	5.58	
F0212 Perform NMIS menu maintenance headrest, or armrest covers	4	3	6.23	

an TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)





Tasks not Referenced to POI



AETC

Examples

		Percent Members Performing		Task Dif
<u>Tasks</u>		1 st Job	1 st Enl	
B0-58	Prepare foods for fiber and residue restricted diets	30	48	5.38
B0061	Prepare foods for high caloric diets	30	41	5.12
B0062	Prepare foods for high fiber diets	17	48	5.17
B0068	Prepare foods for protein restricted diets	26	48	5.99
E0170	Collect data for nutrition outcomes	22	41	5.62
E0173	Complete calorie counts	13	38	5.72
E0191	Participate in menu planning	35	38	5.40

Mean TD Rating is 5.00. Standard Deviation is 1.00 (HIGH TD= 6.00)



Job Satisfaction Indicators

(AFSC 4D0X1 vs. Comparative Sample)



AETC

	1-48 Months		49-96 Months		97+ Months	
	2002 4D0X1 (N=52)	Comp Sample* (N=383)	2002 4D0X1 (N=41)	Comp Sample* (N=255)	2002 4D0X1 (N=119)	Comp Sample* (N=533)
Job interesting	17	53	44	69	63	69
Talents well utilized	35	74	54	77	80	83
Training well utilized	71	83	83	84	82	80
Sense of accomplishment	21	59	39	60	59	66
Plan to reenlist	33	38	63	59	58	55

Comparative sample of AFSCs surveyed in the last 12 months includes: 4C0X1, 4P0X1, and 4V0X1



Job Satisfaction Indicators (AD) (Current vs. Previous Study)



AETC

	1-48 Months		49-96 Months		97+ Months	
	2002 4D0X1 (N=52)	1999 4D0X1 (N=143)	2002 4D0X1 (N=41)	1999 4D0X1 (N=51)	2002 4D0X1 (N=119)	1999 4D0X1 (N=155)
Job interesting	17	17	44	45	63	65
Talents well utilized	35	34	54	65	80	77
Training well utilized	71	62	83	76	82	84
Sense of accomplishment	21	29	39	51	59	63
Plan to reenlist	33	49	63	63	58	63



Job Satisfaction Indicators (AD) (Across Specialty Jobs)



AETC

	Hospital Kitchen Cluster (N=112)	Clinical Dietitics Indep. Job (N=13)	Nutrition Education Indep. Job (N=20)
Job interesting	37	23	75
Talents well utilized	54	38	85
Training well utilized	76	62	90
Sense of accomplishment	38	15	65
Plan to reenlist	53	38	52



Job Satisfaction Indicators (AD) (Across Specialty Jobs)



AETC

	Management, Supervision & Training Cluster (N=299)	Equipment Indep. Job (N=5)	Storeroom Indep. Job (N=8)
Job interesting	75	80	38
Talents well utilized	89	80	62
Training well utilized	89	80	87
Sense of accomplishment	66	80	38
Plan to reenlist	55	60	63



Predictive Retention Analysis

First-Term Airmen (N=52)



AETC

	Percent Responding	Average
Planning to Reenlist (N=17)		
Job security	65	2.36
Off-duty education or training opportunities	59	2.30
Medical or dental care for AD member	59	2.30
Retirement benefits	47	2.5
Pay and allowances	41	2.86
Planning to Separate (N=35)		
Military lifestyle	71	2.36
Pay and allowances	63	2.70
Recognition of effort	63	2.68
Esprit de corps/morale	60	2.86
Work Schedule	57	2.55

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence





Productive Retention Analysis

Second-Term Airmen (N=41)



AETC

	Percent Responding	Average
Planning to Reenlist (N=26)		
Retirement benefits	77	2.55
Medical or dental care for AD members	77	2.50
Pay and allowances	77	2.45
Off-duty education and training opportunities	65	2.65
Job security	54	2.57
Planning to Separate (N=15)		
Military lifestyle	73	1.73
Unit manning	60	2.33
Civilian job opportunities	53	2.12
Pay and allowances	47	2.14
Recognition of effort	40	3.00

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence





Predictive Retention Analysis Career Airmen (N=119)



AETC

	Percent Responding	Average
Planning to Reenlist (N=69)		
Job security	77	2.70
Retirement benefits	71	2.82
Pay and allowances	65	2.64
Medical or dental benefits for family members	57	2.74
Medical or dental benefits for AD member	55	2.26
Planning to Separate (N=6)		
Pay and allowances	67	2.75
Senior Air Force leadership	67	2.25
Military lifestyle	67	2.20
Unit manning	50	3.00
Childcare needs	50	2.67

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence





Summary of Results



AETC

- Enhance classification structure description with greater emphases on Nutritional Education Independent Job
- Career ladder progression typical
 - Highly technical at 3-skill progressing to more managerial at 7-skill level and beyond
- Survey data generally supports career ladder documents.
 - Performance coding of elements in Medical Readiness and Subsistence Control sections of STS should be reviewed
 - Review tasks with high Percent Members Performing for inclusion in STS
 - Block III of the POI contains many unsupported learning objectives
 - Review unmatched tasks under Duties B and E for inclusion in POI



Summary of Research (cont.)



AETC

- Job satisfaction indicators
 - Levels of job satisfaction have changed little
 - Low level of job satisfaction during first two enlistments
 - Airmen in Clinical Dietetics Independent Job have much lower levels of job satisfaction
 - Reenlistment intentions of airmen in their first enlistment have declined sharply
- Reenlistment factors
 - Pay and allowances
 - Educational, medical, and retirement benefits
 - Job security
- Separation factors
 - Military life style
 - Lack of recognition



Way Ahead



AETC

- OSR delivery briefing
 - Scheduled for 22 May 02
 - To management course of about 150
- Utilization and Training Workshop (U&TW) being scheduled
- Next SKT rewrite (major) is scheduled for July 02



Questions?



AETC



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Back-Up Slides



Job Survey Background



AETC

- Previous JI and OSR
 - JI: 4D0X1- June 98, Lt Osgood
 - OSR: 4D0X1-March 99, Dr. Burrigh
 - Programming Support- Mr. Hill
- Issues from Last Post-Analysis Review
 - None



Bases Visited during JI Development (# Interviewed)



AETC

- Sheppard AFB, TX (Tech School) (10) 19 Mar
- Travis AFB, CA (5) 4 Apr
- Nellis AFB, NV (4) 2 May
- Lackland AFB, TX (7) 10 May



Job Structure Glossary



- **Job:** A group of similar *positions* where incumbents perform many of the same tasks and spend relatively the same amount of time performing these tasks
- **Cluster:** A series or group of related *jobs* which are distinguishable from each other on some variable (weapon system maintained, ratio of supervisory to technical tasks, etc.)
- **Independent Job:** A job that does not fall within any cluster
- **N:** Number in sample



Career Ladder Progression



AETC

- “Typical” career ladder progression
 - **3-Skill-Level** apprentices perform a very technical job which include very few administrative/supervisory tasks
 - **5-Skill-Level** journeymen still primarily perform a technical job, but acquire a mix of administrative /supervisory tasks
 - **7-Skill-Level** managers, and above, primarily perform supervisory, managerial, and administrative tasks, with relatively few technical tasks
- “Atypical” career ladder progression
 - **7-Skill-Level** personnel are still spending a significant amount of their total job time performing technical duties, with relatively few administrative/supervisory tasks



Training Document Analysis



AETC

- Tasks from job inventory are matched to items in the STS and POI
 - Match is usually conducted with technical school personnel
- Final product provides technical school with data indicating applicability of training documents to work performed in the field in terms of:
 - Percent members performing (PMP) from AETCI 36-2601
 - » 20% PMP for STS
 - » 30% PMP for POI
 - TE and TD ratings
- Listing of tasks not referenced to training document also provided
 - May indicate areas where training coverage is lacking





Task Factor Definition



AETC

- **Task Difficulty (TD):** Task list completed by senior NCOs which rates the relative difficulty of each task to learn





Predictive Retention Indicators



AETC

- Military lifestyle
- Pay and allowances
- Bonus or special pay
- Retirement Benefits
- Military related education/Training opportunities
- Off-duty education and training opportunities
- Medical or dental care for active duty member
- Medical or dental care for family members
- Base housing
- Base services
- Childcare needs
- Spouse's career
- Civilian job opportunities
- Equal employment opportunities
- Number of PCS moves
- Location of present assignment
- Number/Duration of TDY's or deployments
- Work schedule
- Additional duties
- Job security
- Enlisted Evaluation System
- Promotion opportunities
- Training/Experience of unit personnel
- Unit manning
- Unit resources
- Unit readiness
- Recognition of efforts
- Esprit de corps/Morale
- Leadership of immediate supervisor
- Senior Air Force leadership



Retention Analysis

First-Term Airmen (N=52)



AETC

	Percent Responding	Average	S.D.
Planning to Reenlist (N=156)			
Job security	65	2.36	0.88
Off-duty education or training opportunities	59	2.30	0.90
Medical or dental care for AD members	59	2.30	0.90
Pay and allowances	41	2.86	0.35
Retirement benefits	47	2.50	0.71
Planning to Separate (N=199)			
Pay and allowances	63	2.70	0.56
Recognition of effort	63	2.68	0.55
Military lifestyle	71	2.36	0.84
Esprit de corps/morale	60	2.86	0.47
Work schedule	57	2.55	0.74

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence



Predictive Retention Analysis

Second-Term Airmen (N=41)



AETC

	Percent Responding	Average	S.D.
Planning to Reenlist (N=26)			
Retirement benefits	77	2.55	0.67
Medical or dental care for AD members	77	2.50	0.67
Pay and allowances	77	2.45	0.67
Off duty education and training opportunities	65	2.65	0.59
Job security	54	2.57	0.73
Planning to Separate (N=15)			
Unit manning	60	2.33	0.94
Military lifestyle	73	1.73	0.86
Recognition of effort	40	3.00	0.00
Civilian job opportunities	53	2.12	0.78
Pay and allowances	37	2.14	0.83

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence



Inductive Retention Analysis Career Airmen (N=119)



AETC

	Percent Responding	Average	S.D.
Planning to Reenlist (N=69)			
Job security	77	2.70	0.57
Retirement benefits	71	2.82	0.44
Pay and allowance	65	2.64	0.56
Medical or dental benefits for family members	57	2.74	0.44
Medical or dental benefits for AD members	55	2.26	0.47
Planning to Separate (N=6)			
Pay and allowances	67	2.75	0.43
Unit manning	50	3.00	0.00
Senior Air Force leadership	67	2.25	0.83
Military lifestyle	67	2.20	0.50
Childcare needs	50	2.67	0.47

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence